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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,875	08/28/2003	Koichi Yamaguchi	IWAMIYA 2	7824
23599	7590	12/17/2004	EXAMINER	
MILLEN, WHITE, ZELANO & BRANIGAN, P.C. 2200 CLARENDON BLVD. SUITE 1400 ARLINGTON, VA 22201			KEEHAN, CHRISTOPHER M	
			ART UNIT	PAPER NUMBER
			1712	

DATE MAILED: 12/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/649,875

Applicant(s)

YAMAGUCHI ET AL.

Examiner

Christopher M. Keehan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-6, 8, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Invie et al. (6,277,485 B1). Invie et al. disclose a lens comprising a lens substrate (col.1, line 2 and col.4, lines 33-67), a surface layer (col.6, line 64-col.8, line 40), and a backing member provided beneath the surface layer (col.3, line 45-col.4, line 32), wherein the surface layer comprises a hydrolysis-condensation product of a perfluoropolyether modified silane represented by a general formula (I) as instantly claimed (col.6, line 64-col.8, line 40, specifically the structures at col.8, lines 32-35).

Regarding claim 3, Invie et al. disclose a perfluoropolyether that fits the claimed general formula (col.8, line 33). The disclosed formula $\text{XCF}_2\text{O}(\text{C}_2\text{F}_4\text{O})_p\text{CF}_2\text{X}$ is merely that of claim 3 in reverse.

Regarding claim 4, Invie et al. disclose wherein each X group can be represented as alkoxy groups as claimed (Abstract and col.7, lines 21-24).

Regarding claim 5, Invie et al. disclose a coating thickness included in the range as claimed (col.6, lines 47-63).

Regarding claim 6, Invie et al. disclose wherein the backing member is different from the lens substrate, and is an inorganic anti-reflective layer (col.4, lines 8-31).

Regarding claim 8, Invie et al. disclose wherein the surface layer is formed by applying the modified perfluoropolyether onto the backing member, and subsequently performing hydrolysis and condensation (col.10, line 56-col.11, line 24).

Regarding claim 9, Invie et al. disclose adding a hydrolysis catalyst in an amount included in the range as claimed by applicant (col.9, line 59-col.10, line 5).

Claim Rejections - 35 USC § 102/103

Claim 7 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Invie et al. (6,277,485 B1). Invie et al., as applied above, are as set forth and incorporated herein. Invie et al. do not appear to disclose applying the perfluoropolyether by vacuum deposition as claimed by applicant. Invie et al. do disclose applying the perfluoropolyether by a variety of methods (col.10, lines 17-46). The product of Invie et al. appears to be the same as that claimed by applicant, regardless of the process by which the composition of Invie et al. was applied.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Invie et al. (6,277,485 B1). Invie et al., as applied above, are as set forth and incorporated herein. Invie et al. do not appear to specifically disclose the structure of perfluoropolyether as instantly claimed. However, Invie et al. do disclose that the perfluoropolyether can be composed of repeating units, including combinations thereof, that can result in the claimed structure (col.7, lines 33-37). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have created a perfluoropolyether as claimed because Invie et al. teaches that the perfluoropolyether can be composed of a combination of seven different types of repeating units, two of which would create that as claimed by applicant.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ochiai et al. (5,763,061) disclose a structure as claimed with a perfluoropolyether with only one terminal silane.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Keehan whose telephone number is (571) 272-1087. The examiner can normally be reached on Monday-Friday, from 6:30 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on 571-272-1302. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher Keehan

December 14, 2004

Christopher Keehan
Art Unit 1712
Clear